



Neville, P. (2018). Introducing dental students to reflective practice: a dental educator's reflections. *Reflective Practice*, 19(2), 278-290.
<https://doi.org/10.1080/14623943.2018.1437400>

Peer reviewed version

Link to published version (if available):
[10.1080/14623943.2018.1437400](https://doi.org/10.1080/14623943.2018.1437400)

[Link to publication record in Explore Bristol Research](#)
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via Taylor & Francis at <https://www.tandfonline.com/doi/full/10.1080/14623943.2018.1437400> . Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available:
<http://www.bristol.ac.uk/pure/about/ebr-terms>

Introducing dental students to reflective practice: a dental educator's reflections

Dr Patricia Neville

School of Oral and Dental Sciences, University of Bristol UK

Lower Maudlin Street, Bristol, BS1 2LY, UK

patricia.neville@bristol.ac.uk

Acknowledgements:

The author would like to thank Dr Julie Williams for her comments on an earlier version of this article

Funding:

No funding bodies have supported this research

Disclosure of interest:

None

Word count: 5999 words

Introducing dental students to reflective practice: a dental educator's reflections

Patricia Neville

Abstract: There is growing consensus that being reflective and developing reflective practice is an important part of becoming a healthcare professional, adding to and enhancing our everyday professional values, knowledge and skills. For dentists, reflective practice is an essential part of dental training and professional development with dental undergraduate curricula creating and scaffolding opportunities for students to be reflective and develop reflective writing skills. This article describes the introduction of a reflective portfolio to the undergraduate Bachelor of Dental Science (BDS) programme at University of Bristol. This will be followed by the author sharing some personal reflections, as the faculty member overseeing the assessment of these reflective portfolios, on the first year of this initiative. Lessons learned from the exercise as well as areas for future work and improvement will also be mentioned.

Key words: reflective practice; dental students; educator reflective practice; reflective practice programme design; faculty and institutional supports.

There is growing consensus that being reflective and developing reflective practice is an important part of becoming a healthcare professional, adding to and enhancing our everyday professional values, knowledge and skills (Dempsey, Halton & Murphy 2001; O'Kelley Wetcome et al., 2010, General Dental Council [GDC], 2011; Asadoorian, Schonwetter & Lavigne 2011). Health professionals, including doctors, nurses, dentists and veterinary surgeons are expected to have the capacity to reflect upon their practice throughout their careers and to demonstrate insight by responding appropriately to self-reflection. These abilities, including an understanding of personal strengths and weaknesses, are necessary for continued professional development, especially if there is evidence of sub-optimal performance (Hays et al., 2002). Indeed the ability to self-reflect with insight is referred to within the medical, dental, veterinary and nursing undergraduate curricula as a core, or key skill (American Association of Medical Colleges [AAMC], 2008; General Medical Council [GMC], 2009; Nursing and Midwifery Council, 2010).

Being reflective helps us to identify how and in what ways our knowledge links with our practice; to better understand our own thinking and learning; to understand our strengths and weaknesses; to identify and question our underlying values and beliefs and to identify personal limitations or areas for improvement (Monash University; Jonas-Dwyer, Abbott & Boyd, 2013). Overall, being reflective may allow clinicians to move from simply 'knowing how' to provide dental and medical care to 'actually providing care' (O'Kelley Wetcome et al., 2010, p.1338) to their patients.

For dentists, reflective practice is an essential part of dental training and professional development. Standard 9 the General Dental Council's (2011) *Preparing for Practice* highlights the importance of being able to: '[e]xplain the range of methods of learning and teaching available and the importance of assessment, feedback, critical reflection, identification of learning needs and appraisal in personal development planning' (Standard 9.3). Since being reflective is a requirement for registrants of the GDC, it is also a feature of Dental Foundation (DF) Training and any specialist training that dentists may wish to pursue. It is important then that dental undergraduate curricula create and scaffold opportunities for students to be reflective and develop reflective writing skills (O'Kelley Wetcome et al., 2010; GDC, 2011; Asadoorian, Schonwetter & Lavigne, 2011; Jonas-Dwyer, Abbott & Boyd, 2013; Tsang and Walsh, 2010).

The purpose of this article is to describe the introduction of a reflective portfolio to the undergraduate Bachelor of Dental Science (BDS) programme at University of Bristol. This will be followed by the author sharing some personal reflections, as the faculty member overseeing the assessment of these reflective portfolios, on the first year of this initiative. Lessons learned from the exercise as well as areas for future work and improvement will also be mentioned.

The reflective portfolio in the University of Bristol BDS programme

The assessment of student reflective practice is located within the Personal and Professional Development (PPD) thematic stream of the School of Oral and Dental Sciences, University of Bristol undergraduate programme. PPD runs across all five years of the degree and the tutors are responsible for overseeing the teaching, learning and assessment of students with regard to the social and behavioural sciences aspects of their education. This includes:

- sociology and psychology as applied to dentistry
- ethics and legal issues
- professionalism and
- communication skills

Previously, only Year 5 students had their reflective practice assessed through an account they wrote on their experience of undertaking and completing an Elective project, although we now have a framework for the teaching and formative assessment of reflective practice across all five years of the programme. The school recently developed reflective portfolio assignments for its Year1-Year4

students. The submission deadlines for each year group's reflective portfolio were spread across the academic calendar, as these varied submission dates allow the author to spread the load of marking assignments evenly across the academic year.

The teaching support for the students' reflective assignment was delivered through self-directed learning materials available on the University's Virtual Learning Environment (VLE). This teaching decision was made for pragmatic reasons with the difficulty in finding time in the teaching timetable to give an introductory lecture to all Year groups about reflective practice and writing. Conscious of the different learning styles of our students, the resources include explanatory PowerPoint slide presentations explaining reflection and reflective writing, web links to useful websites (e.g. Skills Team University of Hull) on how to write reflectively, and a link to YouTube videos that explains what reflective writing entails.

Each Year group was set a designated reflective writing task, mindful of their cumulative level of experience and clinical and patient exposure. For example, Year 2 students were asked to reflect upon their experience of meeting patients for the first time on clinic and Year 4 students were asked to reflect on an incident where they had to break bad news to a patient. The aims and objectives of each task were written and mapped against the GDC(2011) *Preparing for Practice* document. The reflective task contained a number of guided reflective questions, following the 'What? So What? Now What?' model of reflective writing(Driscoll, 2007). The assignment brief contained the aims and objectives of the task, the structured questions as well as helpful tips and prompts on how to answer each question(see example Appendix 1). The word limit for the task was fixed and varied depending on the year of study, i.e. Year 1 to Year 3 reflective tasks have a word limit of 600 words, 800 words for Year 4 students.

A 10 point scale grading matrix was developed for all the reflective tasks(See Appendix 2). The rubric was originally developed by a clinician and non-clinician staff members and piloted a few years previously to the full roll out of the reflective portfolios. Good self-reflection, according to this rubric, was measured against their performance across 8 different criteria. Each reflective entry was assessed in a way similar to the method proposed by Wald et al. (2012). First, each entry was read for key phrases and sentences 'to assess the presence and quality of all criteria'. This was followed by attending to the overall narrative. It is argued that looking at specific and generic elements of the writing offers a fairer interpretation of the quality of the insight and writing. As this assignment was a 'must pass' component of the course, student received a 'pass' or 'fail' grade for the work, once evidence of a satisfactory level of self-reflection was found. Students who received 7 or more out of 10 for their work were deemed to have passed the assignment. If students received less than 7 out of 10 they were asked to re-write their answers and re-submit within one week of receiving their grade. The author graded all entries and provided students with detailed qualitative feedback on their submission (See table 2 for examples of anonymised feedback). This individualised feedback contained examples and reference to the criteria to substantiate the comments made and grades allocated by the marker. A sample of students' work(approximately 25%) were double marked by the author and another lecturer with responsibility for the teaching of social and behavioural sciences at the School colleague as were all submissions that scored less than 7.

Students whose submissions received less than 7 marks were invited to a one-to-one meeting with the author to discuss their reflective task and their feedback. Writing and reflective advice was given to the student to help them prepare their second draft. All subsequent drafts were re-read by the author and further feedback was given to the student. Students were invited to re-submit their task once the author felt that that their re-draft addressed all the initial issues raised in the feedback.

The reflective portfolio programme: Personal reflections and initial findings

When we first presented the reflective tasks to the different year groups, I wasn't sure how the students would react to the task. Many students equate being an effective practitioner with

developing their status as an 'expert' and honing their clinical reasoning skills. Much lower down on their priorities is a concern with the 'person' of the dentist and the skills of reflection (Aukes et al., 2007, p.179). Research informs us that reflective practice is a synchronic process, one that can grow and develop with time (Dempsey, Halton & Murphy 2001). Some students can progress easily from having some level of awareness about their practice (pre-reflector stage) to developing a conscious self-awareness (reflector stage), others require a lot of support to achieve the end goal. Though research assures us that, for those weaker students, reflection can be taught and learned (Asadoorian, Schonwetter & Lavigne 2011), the heterogeneity of the student cohort(in terms of their age, gender, class and ethnicity) made me apprehensive about the assignments and the general student performance with the task.

Unsurprisingly, Year 1 students had the highest re-submission rates for the reflective assignment (see Table 1). We can attribute this to the fact that the majority of these students are direct entry students, with potentially limited life experience to draw from when assessing the value of an experience in the dental school. Also, these students are 'beginner' or novice learners of their profession (Brenner, 1984; Dreyfus, 2004), not yet familiar with the theories and principles that inform patient centred care. Moreover, most of these students are the product of a second level education system that encourages third person writing style and not first person testimonies. These personal and professional reasons may explain why 18.5% of Year 1 students had to resubmit their reflective task. Interestingly, the number of resubmissions fell sharply between Year 1 and Year 2 students, with all Year 4 students passing their reflective portfolio tasks at the first attempt (see Table 1). This trend is encouraging because it may be evidence of the continued development of and improvement in written reflective skills as students' progress through the course. The improvement in the students' reflective writing skills and practice across the year groups can be evidence in the feedback I gave students about their portfolio (see Table 2). There we find an increasing use of 'I' statements as we move across the years, with students acknowledging the value of 'soft skills' in dentistry as well as openly identifying areas for personal growth and professional/clinical skills improvement. I was also surprised by the types of critical incidents students shared and reflected on. Some students recalled near 'never event' experiences on clinic, others shared how they responded to sensitive patient disclosures, such as being survivors of abuse. These reflective records serve as a useful reminder that dental students, though 'beginners', are exposed to many different and, at times, difficult clinical scenarios and patient encounters.

Useful insights from our first experiences with this programme

First, I learned that most dental students can be self-directed in terms of developing reflective writing skills. However, we do need to anticipate that some students will struggle with the process well. Writing reflectively requires students to think, formulate and share their 'subjective, personal, indefinite vantage point' (Shapiro et al., 2006, p. 234). This skills is actively moderated by the personal development of the students as well as a break away from the analytical model of knowledge and learning they have experienced in their education to date (Shapiro et al., 2006). Additional supports such as more direct teaching and modelling of reflective writing may be needed to help all students, but especially Year 1 students.

Second, a general rubric that highlights global rather than specific criteria or markers of reflective learning is an adequate tool for assessment written reflective tasks. By using a generic rubric we could accommodate the variety of experiences presented without falling into the trap where students can become goal focused, writing specifically to the rubric rather than engaging with the reflective process and presenting an honest account of their experience (Smith and Trede, 2013).

Third, I was surprised by the emotional impact that assessing reflective portfolio accounts could have on me. At times it was difficult to remain an impartial grader of the work. I was humbled by what I read, sympathised with them when I read about a difficult patient encounter and smiled and applauded them when I read how much an event had changed their self-perception or professional outlook. As a member of the team involved in teaching PPD I spend most of my working week inviting and encouraging students to engage with their 'non-clinical' side and develop their communication and soft skills. While some students enjoy this aspect of their undergraduate curriculum, there is a consistent minority who openly dismiss our classes as dentally irrelevant. Others find the interactive communication skills workshops to be staged, artificial and forced. Faced with this low level learner resistance, the PPD teaching team are often left wondering about the personal development of some of the undergraduate dental students and their commitment to patient-centred care. Reading these reflective accounts offered some reassurance that the students are growing and grappling with the personal and professional vagaries of their profession.

Fourth, the emotional aspects of dental education are often an under-recognised and under-resources aspect of professional education. Reflective thinking and writing encourages the writer to be vulnerable, to share feelings, events and experiences that may be uncomfortable to self-acknowledge and express to others. Students may also feel a sense of uncertainty about how the marker will react when reading their reflective accounts (Shapiro et al., 2006, p.235). Instating reflective tasks into an undergraduate dental education programme helps to ventilates these important, though under-reported, issues for students and the profession as a whole. Student reflective portfolios offer us a unique or unprecedented access to the 'dental student voice', albeit in a raw and uncensored way. We as dental educators shouldn't underestimate the impact that working on clinic has on a dental student's personal, interpersonal and professional skill development. Dental educational research been criticised within the literature for the relative absence of the dental student voice *vis a vis* other health care disciplines (Schonwetter et al., 2006; Subramarian et al., 2013). The student voice presented in these reflective accounts told me something about their working conditions, their peer and supervisory relationships, patient encounters and personal confidence. It was good to allow these types of experiences and personal insights to be shared with faculty, and maybe they will be a useful resource to support the flagging student in need of additional personal support or clinical skills development.

Fifth, providing detailed feedback for each student's reflective writing task is very time and labour intensive. I spent four full working days reading, grading and writing feedback for each year group (average class size of 68 students). In spite of this commitment of staff time, I firmly believe that if we ask students to share their personal experiences with us, then we should respect their reflective accounts and give them the due courtesy and respect needed, with personalised feedback. I have learned a lot more about my students from reading their accounts, and I have come to appreciate the types of challenges-intellectual, technical, social and emotional- that dental students face throughout their studies. It has helped to humanise them in my eyes, and I hope they have appreciated my personal feedback and, when required, one-to-one meetings as well.

Implications and considerations

Much of the academic record attends to how best to teach and assess student reflective practice (Wald et al., 2010; Wald et al., 2013; Wilson and Stewart, 2013). As a result most of the research on reflective practice is student-facing, with little room given over to consider the impacts that implementing and administrating a programme of reflective practice for students will have on staff, as well as curricular and institutional demands (Smith and Trede, 2013). Many of the issues raised

here are not unique to our programme, in fact, they reflect common concerns shared by most professional programmes that deliver reflective practice (Parrish and Crookes, 2014).

Faculty

There has been very little research on teaching and assessing reflection from the educator's perspective (Sukhato et al., 2016). Nevertheless, it is acknowledged that teaching and assessing reflective learning in the medical/professional curriculum places huge time demands on staff (Song and Stewart, 2012). Additionally concerns have been raised by tutors about skills gaps they perceived themselves as having in this area (Sukhato et al., 2016). Many clinical educators felt they have inadequate understanding of the theory of reflection, even though they may have been practicing it throughout their professional career, but feel uncomfortable and ill prepared for teaching and assessing reflective practice (Sukhato et al., 2016; Muir, 2010). It is self-evident that where educators are not adequately trained to deal with reflective practice, student learning will suffer (Parrish and Crookes, 2014; Braine, 2009). Only when staff feel that they have the skills, confidence and knowledge to deal with student reflective practice can they foster reflective practice among their students (Braine, 2009). As a result, a comprehensive training programme should be implemented for educators with responsibility for teaching and assessing reflective practice.

This training should include a review of current theory on reflective practice and different ways of assessing the reflective skills required. Particular attention should also be paid to ensuring grader consistency (Smith and Trede, 2013, p.448). Research informs us that some students can be 'performing, strategic and cautious' (Ross 2011 cited in Smith and Trede 2013, p.446) when it comes to completing reflective written tasks, writing what they think educators want to see, being influenced by either how reflective practice is taught to them or by the grading rubric, rather than the task representing an accurate representation of their personal development and insight (MacFarlane and Crowley, 2009, Hobbs 2007, Ross 2012, cited in Smith and Trede 2013, p.446; Birden and Usherwood, 2013). While the rubric is there to guide and inform grading, sometimes the marking scheme doesn't quite prepare you for ascertaining if the account is authentic or truthful. However, moot this point is, it is interesting to find that in Birden and Usherwood's (2013) study those who admitted to embellishing their reflective accounts did not consider it to be 'dishonest' (p.408), rather evidence of their being 'expedient' expediency, getting what need to be done in order to progress. Does it matter that some students might fabricate their reflective account? If so, how do you check for this at grading stage? These issues are worth discussing and aired during assessor training. Furthermore, this training should be made available to all faculty-clinical and non-clinical staff so as to avoid perpetuating the 'hidden curriculum' (Hafferty 1998) in medical and dental education which could lead to a 'ghettoising' of reflective practice as a concern for non-clinical staff members.

Curricular issues

As other colleagues working in higher education will testify, a great deal of planning and preparation is required when writing and devising reflective tasks for a professional undergraduate curriculum (Aronson, 2011). However, it is also important that the introduction of teaching and assessment of reflective practice into an existing programme is done in a meaningful way and integrated vertically and horizontally across the curriculum. For instance, in our dental school, the assessment of reflective practice is located within PPD, and there may therefore be a temptation for reflective practice to be labelled incorrectly as a 'non clinical' skill. It is therefore important that reflective practice is openly mentioned, discussed and reinforced across the whole dental undergraduate programme as a necessary professional skill.

Institutional issues

The teaching, learning and assessment of reflective practice has been commonplace in medical and nursing education for at least twenty years (Mann, Gordon and MacLeod 2009), and was introduced as part of early non-mandatory dental vocational training programmes in the 1990's. It is important that reflective practice is accepted at a School level, so as to ensure that an institutional culture that acknowledges and rewards reflective practice, among students, staff and Faculty. Aronson (2011, p. 202) urges us to be proactive and implement 'programmatic or institutional guidelines'. Drafting a School policy on reflective practice is not just about issuing guidelines regarding protected time to assess reflective entries but also about reiterating the School's duty of care to its students and staff. This could include outlining the School's and dental educator's roles and responsibilities regarding particular types of student disclosures, such as following up with a student regarding a distressing incidence (debrief) or if some concern was raised about a peer or clinical supervisor's conduct. It may also involve ensuring that those who mark reflective assignments can access confidential support for their own well-being if needed.

Conclusions

This article has described my reflections of administering a reflective practice programme for Year 1 to Year 4 undergraduate dental students. The opinion expressed here about the quality of these dental students' reflective practice abilities, is based on a subjective interpretation and reflection of one academic year's body of work. Clearly, empirical analysis of the reflective portfolios complete with ethical approval is needed before any of these comments can be substantiated. There are many examples of this type of study in the literature and it would be an avenue worth pursuing in the future (Jonas-Dwyer, Abbott & Boyd, 2013; Tsang and Walsh, 2010; Tsang, 2012; Koole et al., 2013). Moreover, I think it is important to gain an insight into the students' perceptions of reflection more generally, and their own evaluation of the reflective tasks. This research will be important because it will help identify if the reflective portfolio is fit for purpose (O'Connell & Dymont, 2011) enabling students to reflect and identify gaps in their knowledge, skills, values and professional practice.

Overall I believe that all undergraduate BDS programmes should support and foster reflection among their students to enhance their personal and professional development. However, these learning objectives will not be fully achieved unless there is a School-wide commitment to supporting the reflective practice of students and educators. This involves adequately resourcing the programme with staff training and support as well as providing clear School guidelines regarding cases of 'reflector distress' (Aronson, 2011) or staff causes of concern.

References

American Association of Medical Colleges. (2008). *Recommendations for Clinical Skills Curricula for Undergraduate Medical Education*. Retrieved from:
https://www.aamc.org/download/130608/data/clinicalskills_oct09.qxd.pdf.

Aronson, L. (2011). Twelve-tips for teaching reflection at all levels of medical education. *Medical Teacher*, 33(3), 200-205. doi: 10.3109/0142159X.2010.507714.

Asadoorian, J., Schonwetter, D.J., & Lavigne, S.E. (2011). Developing Reflective Health Care Practitioners: Learning from experience in Dental Hygiene Education. *Journal of Dental Education*. 75(4), 472-484.

Aukes, L.C., Geertswa, J., Cohen-Schotanus, J., Zwierstra, R.P., & Slaets, J.P.J. (2007). The development of a scale to measure personal reflection in medical practice and education. *Medical Teacher*, 29(2-3), 177-182.

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Reading, MA: Addison-Wesley.

Birden, H.H., & Usherwood, T. (2013). 'They liked it if you said you cried': how medical students perceive the teaching of professionalism. *Medical Journal of Australia*, 199(6), 406-409.

Braine, M.E. (2009). Exploring new nurse teachers' perception and understanding of reflection: An exploratory study. *Nurse Education in Practice*, 9, 262-270. doi: 10.1016/j.nepr.2008.08.008.

Deanna Wilson, J., & Stewart, R.W. (2013). A broader basis for teaching reflection, *Medical Teacher*, 35(3), 258-259. doi: 10.3109/0142159X.2013.765555

Dempsey, M., Halton, C., & Murphy, M. (2001). Reflective learning in social work education: scaffolding the process. *Social Work Education: The International Journal*. 20(6), pp. 631-641.

Driscoll, J. (2007). *Practicing Clinical Supervision: A Reflective Approach for Healthcare Professionals*. 2nd ed. Edinburgh: Bailliere Tindall Elsevier.

Dreyfus, S.E. (2004). The Five-Stage Model of Adult Skill Acquisition. *Bulletin of Science, Technology & Society*, 24(3), 177-181. doi: 10.1177/0270467604264992

Duffy, A. (2009). Guiding students through reflective practice-The preceptor's experiences: A qualitative descriptive study. *Nurse Education in Practice*, 9, 166-175. doi: 10.1016/j.nepr.2008.07.002.

General Dental Council. (2011). *Preparing for practice. Dental team learning outcomes for registration*. Retrieved from: <http://www.gdc-uk.org/Newsandpublications/Publications/Publications/GDC%20Learning%20Outcomes.pdf>.

General Medical Council. (2009). *Tomorrow's Doctors*. Retrieved from: http://www.gmc-uk.org/Tomorrow_s_Doctors_1214.pdf_48905759.pdf.

Hafferty, F.W. (1998). Beyond Curriculum Reform: Confronting Medicine's Hidden Curriculum. *Academic Medicine*, 73(4), 403-407.

Hays, R.B., Jolly, B.C., Caldon, L.J., McCrorie, P., McAvoy, P.A., McManus, I.C., & Rethans, J.J. (2002). Is insight important? Measuring capacity to change performance. *Medical Education*. 36(10): 965-71.

Jonas-Dwyer, D.R.D., Abbott, P., & Boyd, N. (2013). First reflections: third-year dentistry students' introduction to reflective practice. *European Journal of Dental Education*, 17: e64-e69. doi: 10.1111/j.1600-0579.2012.00763.x

Koole, S., Vanobbergen, J., De Visschere, L., Aper, L., Dornan, T., & Deres, A. (2013). The influence of reflection on portfolio learning in undergraduate dental education, *European Journal of Dental Education*, 17, e93-e99. doi: 10.1111/j.1600-0579.2012.00766.x.

Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: a systematic review. *Advances in Health Sciences Education Theory and Practice*, 14, 595-621.

Monash University. (2016). Language and Learning online-Reflective writing. Retrieved from: <http://www.monash.edu.au/lis/lionline/writing/medicine>

Muir, F. (2010). The understanding and experience of students, tutors and educators regarding reflection in medical education: a qualitative study. *International Journal of Medical Education*, 1, 61-67. doi: 10.5116/ijme.4c65.0a0a

Nursing and Midwifery Council. (2010). Nursing and Midwifery Council Competencies for Entry to the Register. Retrieved from: <https://www.nmc.org.uk/standards/code/N.M.C.>

O'Kelley Wetcome, A., Boyd, L.D., Bowen, D.M., & Pattillo, R.E. (2010). Reflective Blogs in Clinical Education to Promote Critical Thinking in Dental Hygiene Students. *Journal of Dental Education*, 74(12), 1337-1350.

O'Connell, T.S., & Dymont, J.E. (2011). The case of reflective journals: is the jury still out? *Reflective Practice*, 12(1), 47-59. <http://dx.doi.org/10.1080/14623943.2011.541093>

Parrish, D.R., & Crookes, K. (2014). Designing and Implementing reflective practice programs – Key principles and considerations. *Nurse Education in Practice*, 14, 265-270. doi: 10.1016/j.nepr.2013.08.002.

Schonwetter, D.J., Lavigne, S., Mazurat, R., & Nazarko, O. (2006). Students' perceptions of effective classroom and clinical teaching in dental and dental hygiene education. *Journal of Dental Education*, 70, 624–635.

Shapiro, J., Kasman, D., & Shafter, A. (2006). Words and Wards: A Model of Reflective Writing and Its Uses in Medical Education. *Journal of Medical Humanities*, 27, 231-244.

Smith, M., & Trede, F. (2013). Practical concerns for educators assessing reflections of physiotherapy students. *Physical Therapy Reviews*, 18(6), 445-451. <http://dx.doi.org/10.1179/1743288X13Y.0000000099>

Song, P., & Stewart, R., (2012). Reflective writing in medical education. *Medical Teacher*, 34(11), 955-956. doi: 10.3109/0142159X.2012.716552.

Subramanian, J., Anderson, V.R., Morgaine, K.C., & Thomson, W.M. (2013). The importance of 'student voice' in dental education. *European Journal of Dental Education*, 17, e136-141. doi: 10.1111/j.1600-0579.2012.00773.x.

Sukhato, K., Sumrithe, S., Wongrathanandha, C., Hathirat, S., Leelapattana, W., & Dellow, A. (2016). To be or not to be a facilitator of reflective learning for medical students? A case study of medical teachers' perceptions of introducing a reflective writing exercise to an undergraduate curriculum. *BMC Medical Education*, 16, 102, doi:10.1186/12909-016-0624-2.

Tsang, A.K. & Walsh, L.J. (2010). Oral health students' perceptions of clinical reflective learning – relevance to their development as evolving professionals. *European Journal of Dental Education*, 14, 99-105. doi: 10.1111/j.1600-0579.2009.00598.x.

Tsang, A. (2012) Oral Health Students as Reflective Practitioners: Changing Patterns of Student Clinical Reflections over a Period of 12 Months. *Journal of Dental Hygiene*, 86(2), 120-9.

Wald, H.S., Reis, S.P., Monroe, A.D., & Borkan, J.M. (2010). "The Loss of my Elderly Patient": Interactive reflective writing to support medical students' rites of passage. *Medical Teacher*, 32(4), e178-e184. doi: 10.3109/01421591003657477.

Wald, H.S., Borkan, J.M., Taylor, J.S., Anthony, D., & Reis, P. (2012). Fostering and evaluating reflective capacity in medical education: Developing the REFLECT rubric for assessing reflective writing. *Academic Medicine*, 87(1), 41-50. doi: 10.1097/ACM.0b013e31823b55fa.

Portfolio Task: Year 1

Description

During the past term, you have visited South Bristol Community Hospital. The following reflective exercise has been developed based on your experiences there. Please answer both part A and B of the task by the submission deadline of **XXXX**

Aims

This reflective task enables students:

- To recall and reflect on their own **personal** experiences of visiting South Bristol Community Hospital (SBCH)
- To use these personal reflections to assess what they **personally** learned from the experience.

Objectives

At the end of this reflective exercise, students should:

- Have continued to develop skills in personal self-assessment and personal reflection
- Be able to explain the roles of the dental hygienist, dental nurse and dentist and how these individuals work together as a team

Questions

Answer both section A and B questions

Part A: Pick one event from your visit to South Bristol Community Hospital where you observed teamwork in practice.

1. Summarise the event in your own words (max word limit 100 words)
2. How did this observation/event exemplify the various aspects of Principle 6 - 'Work with Colleagues in a way that is in the patient's best interests'-from the Standards for the Dental Team Document (GDC 2014)? Give two examples in your answer (max word limit 200-250 words)
3. What did this observation of teamwork teach you about your team work skills? How prepared do you think you are to work in a team? Do you have experience of teamwork? Do you think you make a good team player? Why? Why not? (max word limit 100 words)

Part B: Overall, as an experience, what did you personally gain from the visits to South Bristol Community Hospital?

(a) with regard to yourself

(b) with regard to patients

(c) working in a healthcare profession.

Has the experience highlighted any gaps in your skills? (max 200 words)

Key points and prompts

The task is structured into two parts to help students' reflective skills.

Part A asks students to pick one specific event during their time at SBCH where they observed team working and answer specific questions about that event.

- For *question 1*, tell us about the event in your own words. Try and be as factual as possible when relaying what happened and present the facts in a logical order.
- For *question 2*, re-read the *Standards for the Dental Team* document. Principle 6 comprises a number of clauses. Read this thoroughly and focus in on two clauses that you feel you can discuss further in relation to the event you have summarised for question 1.
- For question 3, think about how the experience of observing teamwork in action impacted on you. Some points to think about could be: From that observation, what does teamwork actually mean/involve? Do you think that you possess good team player skills, if so, what might they be? Or, do you doubt your ability to be a good team player? If so, what can you do to become a better team player in the future?

Part B asks students to think and write about what they learned overall from their visits to SBCH.

Writing a personal reflection piece like this involves writing about the new knowledge and insights you have gained from the experience **about yourself**. What this new knowledge and personal insights might entail will be different for everyone. In this regard, there is no 'right' or 'wrong' answer to this personal reflection; however, we will be looking for you to give examples of what you have learned about yourself and why what you learned about yourself is important to you.

Here is a list of some prompts which may help you answer this question.

- *Reflections about yourself*: What are your feelings about this experience? Has it challenged or confirmed your beliefs or assumptions about yourself? For example: Are you generally a shy person and did you find it intimidating?

- *Reflections about patients of SBCH:* what has this experience of visiting an outreach clinic shown you about the needs of patients who visit SBCH? Do you have a better understanding of the types of health issues SBCH patients have?
- *Reflections about working in a healthcare profession:* has this experience given you new insight into the work of dentists? Is Dentistry still something you want to do? What professional skills do you think you will find difficult to master? How could you go about rectifying this?

Marking and grading

Students will receive a Pass/Fail grade for this work. Once evidence of a level of self-reflection is found in your answers you will receive a Pass result. Student who are deemed to have failed this assignment will be asked to re-write their answers and re-submit.

Appendix 2

PPD 1 grading criteria sheet

Student name:

Criterion	Score	Mark
Context/description of event		
There is a concise and easily understood description of the background/context/participant		1
The writing of the reflective journal is appropriately structured and flows logically		1
The writing is in the reflective style i.e. it is not a scientific analysis, it does not write in the third person style; it is personal		1
The writing places the self at the centre of the writing		1
FEEDBACK		
Analysis and reflection		
The candidate provides a personal reflection of the event with a focus on his/her own involvement, response/reaction, behaviour and thinking		1
OR		
The candidate clearly considers and writes about the process of problem identification and action/response taking and/or decision forming with a focus on personal behaviours, and writes about the process of identifying how they will personally improve or change their own behaviours to others if there is a 'next time'		2
Lower level reflective process is evident – the candidate expresses feelings about the situation and how it unfolded ; evidence of personal learning is descriptive with little demonstration of how the candidate 'arrived' at this learning		1
OR		
The candidate may critically reflect on their behaviours/reactions and be reflexive and show in the writing how their personal biases, values and beliefs have been challenged. This is higher level reflective writing and maximises person learning and knowledge about the self.		2
FEEDBACK		

Clarification of learning and competence		
The candidate reflects on development as a competent dental student in her/his management of this event(s)		1
There is a summary or conclusion that draws out personal learning and builds new knowledge		1
FEEDBACK		
Total		10

Marks out of 10: 7 marks required to pass

The outcome is simply pass/fail

If a student passes, they get the full 10 / 10% allocation of marks for the Portfolio Element of the Unit.

If a student fails, they will be asked to revise their reflective account and submit a second attempt, with feedback.

Table 1: Number of reflective portfolio resubmissions (2015-2016) according to year of study

Year	Number of successful first time submissions	Number of resubmissions	Number of successful second time submissions	Total number of students
1	57	13	13	70
2	63	3	3	66
3	66	4	4	70
4	68	0	n/a	68

Table 2: Summary of the author's reflections on the students' reflective writing abilities according to Year group.

Year	Reflective writing	Reflective practice
1	<p>More 'I' statements needed in your answers</p> <p>Writing style tends to be formal</p> <p>Some of the answers provided would be better placed for another question</p> <p>Struggles with keeping to word limit</p>	<p>Answer tends to focus more on the task at hand rather than the process</p> <p>Personal statements made(e.g. I have good communication skills) need to be elaborated on, with supporting example/explanation</p> <p>Superficial or tentative links between self, emotions and the situation are made</p>
2	<p>More 'I' statements used than in Year 1</p> <p>Substantiates personal statements more than in Year 1</p> <p>Some still struggle with writing less formally; text needs to be more accessible</p>	<p>More 'I' statements compared with Year 1</p> <p>Making clear links between self, emotions and situation</p> <p>Evidence of an emerging awareness of patients-their needs and the importance of patient centred care</p> <p>Some write more about the clinical aspects of the situation rather than considering its impact on the patient</p> <p>More subjective/reflective detail needed by some</p>
3	<p>More 'Is' statements used than in Year 2</p> <p>Clinical jargon emerging in their accounts</p> <p>Some needs more 'I' statements</p> <p>Some still struggle to write informally/in accessible language</p>	<p>More detail about personal emotions, self-knowledge and awareness is provided</p> <p>Highlighting personal strengths and areas for future development</p> <p>Some have tendency to write more about the clinical aspect of incident rather than patient perspective</p> <p>Some need more emotional reflection or display subjective account of the event</p>
4	<p>Appropriate amount of 'I' statements being used</p> <p>Some still struggling to find the balance between the recall of the event and their subjective and reflective response to it</p>	<p>Clear evidence of a change in self-perception</p> <p>Makes active links to their communication skills training and actual/real situation</p> <p>Clear recall of the event and feedback from all parties, i.e. patient and supervisor</p> <p>Good level of personal reflection of strengths and areas for development</p> <p>For some, more personal reflection needed</p>